



Developments in vocational education and training policy in 2015–19

DENMARK



Cedefop monitoring of vocational education and training
policies and systems

Progress towards the medium-term deliverables
of the Riga conclusions

Country chapter

DENMARK

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in 2015-19

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Introduction

In June 2015, the ministers in charge of vocational education and training in the EU Member States, the candidate countries and the European Economic Area countries, convened in Riga, agreed on objectives for vocational education and training (VET) policies for 2015-20⁽¹⁾.

Cedefop has been entrusted with monitoring the countries' policies implemented towards reaching these objectives.

This country chapter is part of the monitoring process. It was drafted based on input from the national ReferNet team. It presents an overview of the major policy developments that have taken place in the country in 2015-19, in the areas covered by the Riga medium-term deliverables (MTDs).

The country chapter is structured as follows:

- (a) the introductory section Aspects of vocational education and training context in 2015 briefly sketches the VET context in the country in 2015, highlighting selected figures and major policy initiatives that were just being adopted or started at that time. This introductory section is targeted at setting a baseline to put in perspective the policy choices and developments that have taken place since the beginning of the Riga cycle;
- (b) five thematic chapters then follow, devoted to the five respective MTDs outlined in the Riga conclusions. Each thematic chapter also begins with a 2015 baseline, more specifically addressing the MTD-related topics. The baseline is followed by the presentation of the major policy developments in the MTD since 2015;
- (c) the country chapter ends with a conclusion summarising the main lines of the 2015-19 policy developments and highlighting possible priorities for the future.

This country chapter is part of the information which the European Commission used to prepare the European Semester exercises⁽²⁾ in 2017-19. The chapter also informs the work of Cedefop and the European Training

(1) *Riga conclusions 2015 on a new set of medium-term deliverables in the field of VET for the period 2015-20, as a result of the review of short-term deliverables defined in the 2010 Bruges communiqué:*

https://www.izm.gov.lv/images/RigaConclusions_2015.pdf

(2) European Semester: https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/european-semester_en

Foundation (ETF) in preparing a joint monitoring report on the implementation of the Riga conclusions. Both the joint report and the country chapter are aimed at informing the work of EU Member States' Directors General for Vocational Training (DGVTs) and Advisory Committee for Vocational Training (ACVT) on taking stock of the outcomes of the Riga conclusions and preparing the next steps for the EU VET policy for the next few years.

Aspects of vocational education and training context in 2015

VET in Denmark is a youth education which can lead to further education. On the eve of the Riga cycle, vocational education and training in Denmark was struggling to attract enough students. The proportion of upper secondary students (ISCED 3) in vocational education and training (VET) was 42.5% in 2015, lower than the EU average of 47.3%. At 80.7%, the employment rate of recent VET graduates exceeded the EU average of 75% (2016). In 2016/17, only 18.5% of young people directly from lower secondary school applying for upper secondary education had VET as their first choice.

With 27.7% participation in adult learning in 2016, Denmark ranks among the top performers in the EU.

A VET reform, entitled *Better and more attractive vocational education and training programmes*, was adopted by the Danish parliament in June 2014 and came into effect in August 2015. It was mainly aimed at tackling the problems of a decline in VET's attractiveness and non-completion/drop-out rates. Its medium-term targets were:

- (a) to increase the proportion of young people starting a VET programme from 19% in 2015 to 25% in 2020;
- (b) to reach a completion rate of 60% by 2020.

These targets also apply to all those who do not come directly from lower secondary education, including 18-24 year olds and adults, who represent the largest group of students in vocational education. The difficulties in attracting young people into VET are leading to a significant shortage of skilled workers, which could ultimately slow the pace of economic growth. According to one study, Denmark could face a shortage of 70 000 skilled workers by 2025.

A tripartite agreement between the social partners and the government of October 2017 introduced increased flexibility and re-allocated financial resources for educational development and change. In the agreement, there is a special focus on literacy, numeracy and ICT literacy.

The effects of the VET reform were expected to appear progressively over time.

Table 1. Framework data: score on VET indicators in Denmark and in the EU for 2010-15

Indicator label	2010		2015 (*)		Trend in 2011-15 (per year)			
	DK ^f	EU ^f	Yr	DK ^f	EU ^f	Range	DK	EU
Access, attractiveness and flexibility								
IVET students as % of all upper secondary students	A	A	'14	42.2 ^b	48.0 ^b _{E1}	'13-'14	-1.1	-0.9
IVET work-based students as % of all upper secondary IVET	A	A	'14	99.7 ^b	34.0 ^b _{E2}	'13-'14	0.1	0.1
IVET students with direct access to tertiary education as % of all upper secondary IVET			'14	56.0	69.2 ^{E3}	'13-'14	1.0	-1.4
Employees participating in CVT courses (%)	37.0	38.0 ^e	'10	37.0	38.0 ^e			
Employees participating in on-the-job training (%)	16.0	20.0 ^e	'10	16.0	20.0 ^e			
Adults in lifelong learning (%)	32.6		'15	31.3	10.7 ^b	'13-'15	-0.1	0.0
Enterprises providing training (%)	91.0	66.0 ^e	'10	91.0	66.0 ^e			
Female IVET students as % of all female upper secondary students	A	A	'14	37.2 ^b	42.7 ^b _{E1}	'13-'14	-1.6	-1.0
Employees of small firms participating in CVT courses (%)	36.0	25.0 ^e	'10	36.0	25.0 ^e			
Young VET graduates in further education and training (%)			'15	38.3 ^b	33.0 ^b	'14-'15	-6.2	-0.3
Older adults in lifelong learning (%)	26.7	5.3	'15	24.9	6.9	'10-'15	-0.3	0.4
Low-educated adults in lifelong learning (%)	23.6		'15	21.7 ^C	4.3 ^{bC}	'13-'15	-0.2	-0.1
Unemployed adults in lifelong learning (%)	33.6		'15	28.9	9.5 ^b	'13-'15	-2.3	-0.4
Individuals who wanted to participate in training but did not (%)	12.5 ^B	9.5 ^{eB}	'11	12.5	9.5 ^e			
Job-related non-formal education and training (%)	83.0 ^B	80.2 ^{eB}	'11	83.0	80.2 ^e			
Skill development and labour market relevance								
IVET public expenditure (% of GDP)			'13		0.56 ^b _{E4}			
IVET public expenditure per student (1 000 PPS units)			'13		6.4 ^b _{E5}			
Enterprise expenditure on CVT courses as % of total labour cost	0.7	0.8 ^e	'10	0.7	0.8 ^e			
Average number of foreign languages learned in IVET			'14	0.3 ^b	1.0 ^b _{E6}	'13-'14	0.0	0.0
STEM graduates from upper secondary IVET (% of total)	A	A	'14	16.5 ^b	30.0 ^b _{E7}	'13-'14	0.4	-0.4
Short-cycle VET graduates as % of first time tertiary education graduates			'14	17.3	9.3 ^{E8}	'13-'14	-0.3	0.4
Innovative enterprises with supportive training practices (%)	29.5	41.5 ^{E9}	'12	30.3	41.6 ^{E9}	'10-'12	0.4	0.0
Employment rate for IVET graduates (20- to 34-year-olds)			'15	87.4 ^b	77.2 ^b	'14-'15	1.3	0.3

Indicator label	2010		2015 (*)			Trend in 2011-15 (per year)		
	DK ^f	EU ^f	Yr	DK ^f	EU ^f	Range	DK	EU
Employment premium for IVET graduates (over general stream)			'15	11.4 ^b	5.3 ^b	'14-'15	0.4	-1.0
Employment premium for IVET graduates (over low-educated)			'15	28.6 ^b	23.7 ^b	'14-'15	1.3	-0.1
Workers helped to improve their work by training (%)			'15	81.1	83.7			
Workers with skills matched to their duties (%)	59.6	55.2	'15	54.5	57.3	'10-'15	-1.0	0.4
Overall transitions and labour market trends								
Early leavers from education and training (%)	11.0	13.9	'15	7.8 ^c	11.0 ^c	'10-'15	↘ -0.6	↘ 0.6
30- to 34-year-olds with tertiary attainment (%)	41.2	33.8	'15	47.6 ^c	38.7 ^c	'10-'15	↗ 1.2	↗ 1.0
NEET rate for 18- to 24-year-olds (%)	8.3	16.6	'15	8.4	15.8	'10-'15	↘ -0.1	↘ 0.1
Unemployment rate for 20- to 34-year-olds (%)	9.7	13.1	'15	8.6	12.9	'10-'15	↘ -0.3	↗ 0.1
Employment rate of recent graduates (%)	83.5	77.4	'15	81.7 ^c	76.9 ^c	'10-'15	↘ -0.3	↘ 0.2
Adults with lower level of educational attainment (%)	24.4	27.3	'15	19.6 ^c	23.5 ^c	'10-'15	↘ -0.9	↘ 0.8
Employment rate for 20- to 64-year-olds (%)	75.8	68.6	'15	76.5	70.0	'10-'15	↗ 0.1	↗ 0.3
Employment rate for 20- to 64-year-olds with lower level of educational attainment (%)	62.6	53.4	'15	59.2 ^c	52.6 ^c	'10-'15	↘ -0.7	↘ 0.2
Medium/high-qualified employment in 2020 (% of total)			'16	76.2 ^d	82.8 ^d			

- (*) The data in this column are the data available in 2016. Where 2015 data were not available, data from previous years were used.
- (^A) JOE (UNESCO OECD Eurostat) back reconstruction of 2010 values based on ISCED (international standard classification of education) 2011 not yet available.
- (^B) AES (adult education survey) 2011, used as proxy for 2010 baseline.
- (^C) 2014 b flags in Eurostat online tables ignored on the basis of other relevant Eurostat metadata.
- (^D) Forecast made in 2016.
- (^{E1}) Based on 28 countries; partial information for NL.
- (^{E2}) Based on 25 countries (missing: ES, PL, RO); partial information for NL.
- (^{E3}) Based on 27 countries (missing: NL); partial information for EL, IT.
- (^{E4}) Based on 19 countries (missing: BE, DK, IE, EL, FR, HR, IT, PT, SK).
- (^{E5}) Based on 21 countries (missing: DK, IE, EL, FR, HR, IT, PT).
- (^{E6}) Partial information for NL.
- (^{E7}) Based on 25 countries (missing: HR, IT, UK).
- (^{E8}) Based on 23 countries (missing: BE, IE, FR, CY, UK).
- (^{E9}) Based on 22 countries (missing: DE, IE, EL, NL, SI, UK).
- (^b) Break after 2010, therefore baseline data not included.
- (^u) Eurostat: 'low reliability'.
- (^z) Eurostat: 'not applicable'.
- (^e) Eurostat: 'estimated'.

NB: EU refers to EU-28, unless otherwise specified. Arrows ↗ or ↘ signal a positive or negative trend based on more than two data points and of magnitude 0.1 per year or more. Trends based on more than two data points but of smaller magnitude are indicated by →; trends based on two points only are marked •. Trends are estimated by means of regression models.

Source: Cedefop, 2017a, p. 41.

CHAPTER 1.

MTD 1 – All forms of work-based learning with special attention to apprenticeships

1.1. Baseline 2015

The general framework for the VET system is decided by the Danish Parliament (Folketing). This includes the objectives and structure of the programmes as well as the frameworks for the institutions ⁽³⁾.

At the beginning of the reporting period ⁽⁴⁾, a typical IVET programme would consist of a major part of remunerated practical training in a company ⁽⁵⁾ and about 30% of theoretical training at school. All IVET students were engaged in work-based programmes (99.7% in 2014, compared with 34% in the EU) (Cedefop, 2017a). The majority of IVET programmes were apprenticeship programmes, which required a training agreement between the student and an approved training company. Approximately 50% of companies with more than ten employees provided training places for initial VET ⁽⁶⁾. However, the number of apprenticeship places was still insufficient. Therefore, about fifty placement centres had been established in 2013, with a mission to offer school-based internships. The 2015 VET reform, targeted at developing better and more attractive VET programmes, also placed an emphasis on work-based learning and apprenticeship.

The Danish VET system was characterised by a high level of stakeholder involvement. Social partners, vocational colleges, teachers and students were all involved in developing VET, based on the principles of consensus and shared

⁽³⁾ Cedefop; ReferNet (2014). *Apprenticeship-type schemes and structured work-based learning programmes – Denmark*. <http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/apprenticeship-type-schemes-and-structured-work-based-20>

⁽⁴⁾ This introductory section presents the state of play in the MTD in 2015 as a baseline for the monitoring exercise. Most of the situation it describes has remained unchanged over the reporting period and is therefore still in place at the end of the reporting period. The next sections in this MTD focus on what has changed with respect to this 2015 baseline, and how.

⁽⁵⁾ Students were employed on the basis of joint agreements during the entire education period and with normal and agreed salary, which corresponds to the normal employment situation under labour market agreements.

⁽⁶⁾ Eurostat - Percentage of enterprises providing initial vocational training by size class.

responsibilities. Right from the start of the reporting period, social partners began playing an important role at all levels in the Danish VET system, sharing with the Ministry of Education the responsibility for developing curricula to ensure responsiveness to local labour market needs. They kept in close contact with the Ministry and offered advice on VET-related issues. Employers and employees had established around fifty trade committees responsible for defining the detailed content of VET programmes within the legislative framework (e.g. regarding the duration of programmes and the respective shares of school-based teaching and practical training). They had an obligation to monitor labour market developments and, if necessary, took initiatives to amend existing programmes or develop new ones. They were also in charge of assessing and approving enterprises as suitable for training.

1.2. Policy priorities for 2016-20

The country's priorities in this area ⁽⁷⁾ for 2016-20, as set by the Director General for Vocational Education and Training (DGVT), have four key components:

- (a) more young people to choose VET: the share to be increased to 25% by 2020;
- (b) more students completing VET: the share to be increased to 60% by 2020;
- (c) VET to challenge all students to be as competent as possible;
- (d) trust and well-being at VET schools to be strengthened (commitment made within the European alliance for apprenticeships, EafA).

1.3. Main actions taken in 2015-19

Measures were taken to ensure VET students find an apprenticeship place in a company. The search for a training place sometimes starts too late. To tackle this problem, the government and the social partners have agreed the following measures:

- (a) companies receive a bonus when taking on apprentices. If they do not take any apprentices or not enough (compared to their number of employees), they must pay an extra contribution to the employers' reimbursement scheme;

⁽⁷⁾ According to a survey by Cedefop among Directors General for VET in early 2016.

- (b) initial vocational education and training (IVET) students must start applying for apprenticeships early, which now forms a part of the teaching and learning requirements for the basic course (GF1) ⁽⁸⁾;
- (c) VET schools are to take more responsibility for guiding students in finding an apprenticeship. If a student does not apply for any apprenticeships, the school can reduce the student's grant and even exclude him or her.

These measures (a, b, c) were in force from 2015-18 and appear to have initiated more apprenticeships. In the first months of 2018, nine percent more apprenticeships (1 100) were established compared to the same period in 2017. However, there has been no analysis of individual factors and therefore no evidence of which measures have made the difference.

In August 2016, the Danish government and a number of social partners also agreed on a plan to ensure a sufficient level of skilled labour in the future. Employers committed themselves to providing an additional 8 000 to 10 000 apprenticeship places by 2025 to encourage young people to consider a vocational education and thereby meet future skills needs. This is expected to help progress towards the long-term target of the 2015 VET reform, with 30% of the youth cohort taking up VET directly after compulsory schooling by 2025.

⁽⁸⁾ GF1 stands for *grundforløb 1*, i.e. basic programme 1. See Section 4.4.

CHAPTER 2.

MTD 2: quality assurance mechanisms in line with EQAVET and continuous information and feedback loops in IVET and CVET

2.1. **Baseline 2015**

The quality assurance requirements were defined in the Danish Vocational Education and Training Act ⁽⁹⁾. At the national level, the institution in charge of quality assurance was the National Agency for Education and Quality of the Ministry of Education. It monitored VET providers by carrying out pedagogical inspections, collecting data on several quality indicators and checking conformity with legal and financial requirements. The Agency was responsible for tests and exams within IVET and developing evaluation systems for IVET. It had been appointed as the quality assurance national reference point (QANRP) in 2011.

A national approach to quality assurance had been devised and developed independently from the European quality assurance in vocational education and training (EQAVET). However, it was compatible with the EQAVET framework and applied to IVET, continuing vocational education and training (CVET) and related work-based learning in both cases. The national approach was formally agreed and completed by 2008 ⁽¹⁰⁾. Self-evaluation was considered the backbone of the Danish approach to quality assurance. The statutory order regarding vocational education and training required all IVET providers to put in place a system of quality assurance to ensure continued quality development and to publish the results. IVET providers could choose their own quality concept, but they must also prepare a self-evaluation report and an annual action plan for enhanced development.

Stakeholders had an important and formal role in the national quality-assurance process. At the system level, the advisory council for initial vocational education and training, consisting of the social partners, schools and teachers' associations and other individuals appointed by the Ministry, was closely engaged in policy development and objective setting, and provided advice on all

⁽⁹⁾ Vocational Education Act LBK No 271, 24.3.2017.

⁽¹⁰⁾ It has been continuously developed following the 2015 VET reform.

aspects of IVET. The national trade committees, representing employees and employers within a sector, approved in-company offers of training places according to specific requirements and were responsible for their inspection. Quality rules also applied to in-company training, for which the trade committees and social partners were responsible.

CVET in Denmark was understood as continuing education and training leading to a recognised vocational qualification within a certain trade or profession. CVET was generally targeted at both skilled and unskilled workers. Given that both IVET and CVET were typically provided by the same institutions, the quality approach that had been adopted was largely similar, and the national agency for education and quality monitored CVET providers in the same way as described for IVET. The advisory council for adult and continued vocational training, composed of representatives of the social partners, provided advice to the Ministry of Education on any issue related to the development of CVET, such as the development of standards and of a curriculum for CVET. A national self-evaluation tool called *vis kvalitet* was developed in the late 1990s and came into operation in 2000. The national self-evaluation tool was a compulsory element of the CVET self-evaluation and measures participants' satisfaction with the training provided. The tool allows providers to add further questions to the standard ones.

Several stakeholders took part in aligning VET programmes with labour market needs. The advisory council for initial vocational education and training was involved in developing new VET qualifications and reviewing existing ones or, where appropriate, their discontinuation. The national trade committees also reported annually to the Ministry of Education about any changes needed for each VET programme, such as their duration and content, as well as student intake and skills forecasts. These reports, called *udviklingsredegørelser* (progress reports), formed the empirical foundation for any decisions about changes to VET programmes. The Central Analysis and Forecasting Unit provided information on changing labour market conditions and the need for new occupational profiles. Based on the monitoring of student employment rates upon completion, the Unit published forecasts of labour market needs in relation to VET qualifications. Shorter term labour market forecasts were taken on board as well (EEPO, 2014).

VET graduate tracking was also in place in both IVET and CVET (EC, ICF and 3s, 2018). The national statistical office (Statistics Denmark) collected administrative data annually on graduates and on participation in publicly provided adult and continuing education. Statistics Denmark monitored participation in further education, further qualifications of IVET graduates and IVET graduates' transition to the labour market. It produced an annual report on

job placement rates, unemployment rates and employment status (employed/not employed) regarding VET graduates.

2.2. Quality assurance mechanisms in line with the EQAVET recommendation in 2015-19

For 2016-20, the country's priority in this matter, as set out by the Director General for Vocational Education and Training, consists of improving the monitoring of progress towards the key targets of VET reform at both the national and VET school levels, and including student and company assessments of VET programmes. The monitoring system will consist of a statistical data bank, school action plans and reporting, and an annual report to the Danish parliament. Comprehensive and long-term external evaluation of the VET reform is included. Action implies extra funding and will involve social partners.

The Danish Centre for Social Science Research to promote quality improvement, better use of resources and better management in the public sector (VIVE), Denmark's Evaluation Institute (EVA) and Statistics Denmark, are responsible for the long-term evaluation of the 2015 reform. They have published a number of reports on a research project that runs until 2020: *VET: is the reform working?*

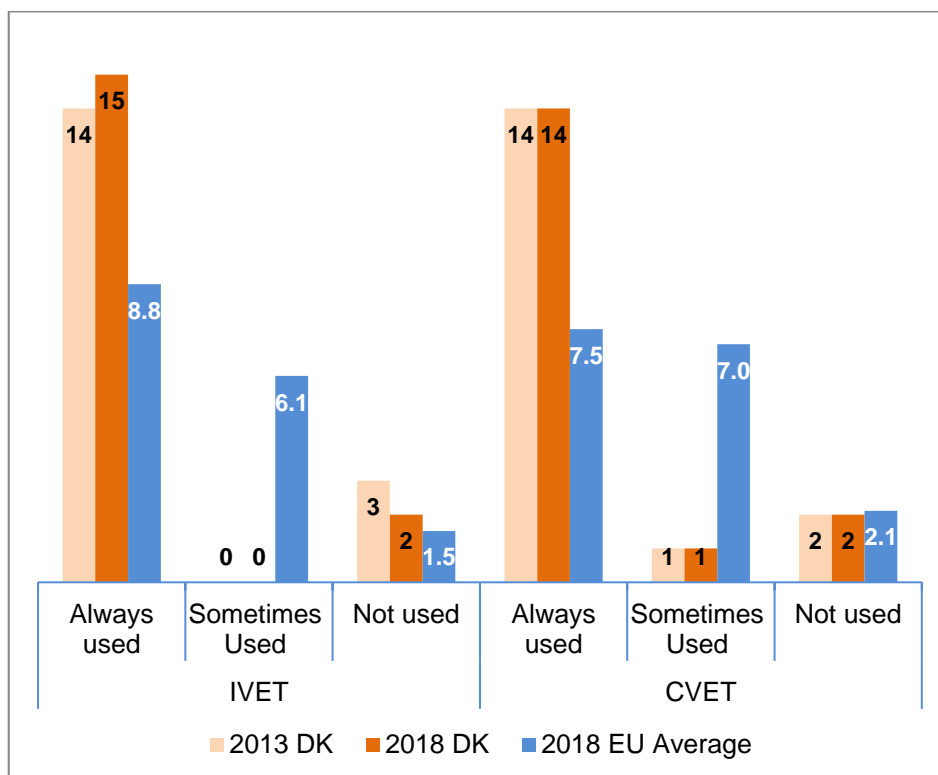
The Ministry of Education has also drawn up an inspiration catalogue for VET colleges to help them develop their 2017 action plans in line with the objectives of the 2015 VET reform. This catalogue is based on a large project conducted by two university colleges which focuses on three areas:

- (a) inspirational tools for quality assurance;
- (b) resources for learning objectives;
- (c) ideas for quality assurance.

Denmark is above the EU average in IVET and CVET in respect of its systematic use of EQAVET indicators to monitor the VET system (the 'always used' item in Figure 1). Compared to 2013, one more indicator was used in IVET in 2018 ⁽¹¹⁾ while in CVET the use of EQAVET indicators remained the same. Data on all EQAVET indicators were collected except on the proportion of accredited VET providers and on the funds invested for the training of teachers and trainers.

⁽¹¹⁾ Denmark did not participate in the EQAVET Secretariat survey in 2018. Data on the use of EQAVET indicators for 2018 refers to the latest available data retrieved from the 2016 EQAVET Secretariat survey.

Figure 1. Use of EQAVET indicators



Key: Of the 17 indicators suggested by the 2009 EQAVET recommendation, 15 were 'always used' in IVET in 2018 in Denmark, compared to 14 in 2013 and 8.8 in the EU on average in 2018.
 NB: EU average was calculated based on available information for 31 out of 35 VET systems.
 Source: Cedefop calculations based on EQAVET secretariat surveys for 2013, 2016 and 2018.

2.3. Continuous information and feedback loops in IVET in 2015-19

For 2016-20, the country's priority in this matter, as set by the Director General for Vocational Education and Training, consists of improving the monitoring of progress towards the key targets of the VET reform at both the national and VET school levels, as well as student and company assessment of VET programmes. Monitoring progress is an ongoing task. Comprehensive and long-term external evaluation of the VET reform is included. Action implies extra funding and is to involve social partners.

From January 2016 to April 2017, the ministry carried out a survey to collect information on school performance tools. The aim of the survey was to identify initiatives that have proved effective. The survey results will form the basis of recommendations to vocational colleges to develop local initiatives to reach the objectives of the 2015 VET reform.

CHAPTER 3.

MTD 3: access to VET and qualifications for all through more flexible and permeable systems, and guidance and validation of non-formal and informal learning

3.1. Baseline 2015

At the beginning of the reporting period ⁽¹²⁾, a major concern with Denmark's VET policy in relation to MTD3 topics was to improve the employability of those on the margins of the labour market, in particular young people with migrant backgrounds. The need for measures of this sort had also been outlined by the country-specific recommendations addressed to Denmark in 2014 by the Council of the EU ⁽¹³⁾.

Adult education also came under scrutiny. The Growth Plan dated April 2013 had allocated DKK one billion to improve adult education and the continuing training of both unskilled and skilled labour for the period 2014-20. Based on cooperation with the Danish Confederation of Trade Unions (LO) and the Confederation of Danish Employers (DA), the plan started to materialise in June 2014 through the Growth Package 2014. It aimed at increasing the number of adults participating in VET programmes by 180 000 ⁽¹⁴⁾.

The Danish national qualifications framework for lifelong Learning (NQF), in force since June 2009, was referred to the European qualifications framework (EQF) in May 2011. In 2013, NQF and EQF levels started being indicated in most qualifications and qualification supplements.

A legal framework for the validation of prior learning has been in place since 2007.

⁽¹²⁾ This introductory section presents the state of play in the MTD in 2015 as a baseline for the monitoring exercise. Most of the situation it describes has remained unchanged over the reporting period and is therefore still in place at the end of the reporting period. The next sections in this MTD focus on what has changed with respect to this 2015 baseline, and how.

⁽¹³⁾ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014H0729%2804%29>

⁽¹⁴⁾ Denmark's National Reform Programme 2015, March 2015, p.49.

Denmark's National Reform Programme, just adopted in March 2015, was focused on providing guidance on the transition from lower secondary school.

3.2. Policy priorities for 2016-20

For 2016-20, the country's priorities in this area, as set out by the Director General for Vocational Education and Training, are twofold:

- (a) for young people:
 - (i) ensure that young people who want to acquire a VET qualification obtain the necessary skills and opportunities to access and complete VET programmes;
 - (ii) support VET graduates with better access to higher education programmes;
- (b) for adults:
 - (i) offer more attractive and targeted VET programmes for adults aged 25+, encouraging more unskilled workers to become skilled;
 - (ii) improve adult education and continuing training for unskilled and skilled labour.

3.3. Main actions taken in 2015-19

3.3.1. Guidance, training choice and changing education pathway

3.3.1.1. *Primary school portfolio of educational choice*

In 2017 a new initiative was launched by the Education Ministry, the *Portfolio of Educational Choice*. The portfolio aims to strengthen thinking on educational choice at primary school (*folkeskole*). From the 2017-18 school year, students in the eighth grade of compulsory education must have their training plan attached to a personal portfolio showing how they have taken advantage of the guidance they have received. It must be clear from the portfolio how, based on the guidance received, the student has undertaken systematic reflection on his or her own educational wishes on the basis of self-awareness, knowledge and experience.

3.3.1.2. *My competence folder for adults*

A new version of the RPL (recognition of prior learning) tool, the *My competence folder* (*Min kompetencemappe*), was launched in 2017, with the aim of giving

Danish citizens an overview of their competences when applying for education courses or jobs.

3.3.1.3. *The initiative Courage in life: paths to education and jobs*

On 19 December 2018, the Ministry of Finance presented a new policy action targeted at giving young people more scope in choosing their educational pathway or changing pathways ⁽¹⁵⁾. Aspects of the initiative include:

- (a) new subsidy and taximeter system;
- (b) a government review in order to implement changes and simplify the current grant and taximeter system in the field of youth education; it does not in itself motivate schools to focus on quality and has become too opaque;
- (c) better education coverage in sparsely populated areas; government provision of DKK 25 million for new educational satellites of vocational education programmes, designed to bring vocational education closer to young people and to give young people better opportunities to train in different parts of the country;
- (d) placing several vocational schools and colleges under the same roof, making it easier for young people to change education within the same institution;
- (e) new referral taximeter system from colleges to vocational schools; young people who regret having begun high school at an early stage must be better supported in switching to a vocational education. A new referral taximeter should give colleges a cash reward if they help students change and gain a foothold in vocational training;
- (f) government to harmonise legislation so that it does not slow down cooperation across educational institutions; public high schools, adult education centres and vocational schools are currently based on different institutional legislation ;
- (g) government strengthening of Study choice Denmark, which advises 250 000 young people each year, with a grant of DKK 24 million to provide better guidance on choosing higher education.

⁽¹⁵⁾ <https://uvm.dk/aktuelt/nyheder/uvm/2018/dec/181219-nyt-ungeudspil-veje-til-uddannelse-og-job-med-mod-paa-livet>

3.3.2. Permeability and flexibility

3.3.2.1. Simplifying the access to VET

The VET system has been restructured and made simpler. Twelve existing access channels have been merged into four ⁽¹⁶⁾. A new study regime was established in compulsory school at 10th grade (EUD 10) to help learners prepare to meet admission requirements for VET. This is aimed at pupils who are motivated to apply for VET but who either do not meet the entry requirements or are uncertain whether this is the right choice for them ⁽¹⁷⁾.

3.3.2.2. Extending the new VET pathway EUX to more VET programmes

Combined vocational and general upper secondary programmes (EUX) integrate VET and general education at the upper secondary level, offering VET qualifications and access to general tertiary education.

3.3.2.3. New VET programme for adults: EUV (erhvervsuddannelse for voksne)

EUV is a new VET programme for adults (aged 25+) that builds on the work experience and prior learning the adult already possesses. EUV gives adults with at least two years of relevant work experience the option to take part in VET-equivalent education without having to follow a basic programme or undertake an internship. The programme is state-funded, costing DKK 26 million in 2015 and DKK 70 million in 2016. From 2017 the costs were estimated to be DKK 36 million.

3.3.3. Transparency, recognition, validation

3.3.3.1. National qualification framework ⁽¹⁸⁾

Setting up the eight-level framework has been a gradual process, starting in June 2009, when the proposal for the framework was adopted by the Ministry of Education, the Ministry of Science, Technology and Innovation, the Ministry of Culture, and the Ministry of Economic and Business Affairs. The Danish national qualifications framework for lifelong learning (NQF) was referred to the European

⁽¹⁶⁾ Care, health and pedagogy; office, trade and business service; food, agriculture and experiences; technology, construction and transportation.

⁽¹⁷⁾ Minimum of 30% must be in cooperation with a VET college.

⁽¹⁸⁾ Cedefop, 2017b.

qualifications framework (EQF) in May 2011. NQF and EQF levels have been included in most qualifications and qualification supplements since 2013.

In 2015-17, NQF and EQF levels have continued to be added gradually to qualifications and certificates. The NQF and the levelling of qualifications thus became a visible part of national education databases. The framework was brought to the operational stage and formed an integral part of the Danish education and training landscape. Two (interconnected) websites were also set up: the NQF-DK website ⁽¹⁹⁾, targeted at the international public; and the UG-DK website ⁽²⁰⁾, which provides the national public with comprehensive information on qualifications, programmes and access.

3.3.3.2. *Validation* ⁽²¹⁾

A legal framework for the validation of prior learning has been in place since 2007. The 2015 VET reform introduced the new VET for adults (EUV) programme for 25-year-olds or older, building on the validation of prior formal, non-formal and informal learning and work experience (Section 3.3.2.3). In spring 2016 the government launched a number of new initiatives targeting refugees. These promoted the use of validation and recognition of refugees' skills and competences (Section 3.3.4) and included a new web portal for existing measures and tools, based on a tripartite agreement with social partners and a bipartite agreement with Danish municipalities. Nevertheless, the use of validation arrangements by stakeholders remains low.

3.3.4. Upskilling pathways: training, reskilling and upskilling vulnerable groups

The new VET programme for adults (EUV, *erhvervsuddannelse for voksne*: Section 3.3.2.3) and the My competence folder initiative (*Min kompetencemappe*: Section 3.3.1.2) are both part of the upskilling pathway policy. In addition, a new vocational programme for newly arrived migrants (new basic integration programme, or IGU) was agreed between the government and the social partners, starting in July 2016. IGU is not a VET programme under the Ministry of Education but a specific programme for the integration of migrants and refugees under the Ministry of Immigration and Integration. It is a dual training programme of 24 months duration (including a twenty-month education programme and four

⁽¹⁹⁾ www.nqf.dk

⁽²⁰⁾ <https://www.ug.dk/>

⁽²¹⁾ Cedefop, 2017b; Aagaard (2016).

months of practical training in a company). The newly arrived migrants who follow this training receive a minimum salary. Access to the Danish unemployment benefit system is granted on successful completion of the programme. Companies employing and training newly arrived migrants receive financial incentives. In December 2019, 1 826 people were enrolled in the IGU programme.

3.3.5. Promoting VET participation through increased attractiveness

On 22 November 2018, parties in the Danish Parliament concluded an agreement to increase the attractiveness of VET ⁽²²⁾. The objective is to attract more students through restructuring its management and making it less bureaucratic. More attractiveness is particularly expected from a stronger focus on practical issues in primary and lower education, reconstruction of the basic course in VET, greater security for internships and reduced drop-out rates, a stronger involvement of the municipalities in guidance, and a stronger focus on professional VET-school boards. The aim is to increase young people's knowledge of VET and their motivations for choosing VET programmes. Funding of DKK 2.3 billion was secured, meaning that VET will have the same financial framework in 2019 as in 2018. The main initiatives under the agreement are:

- (a) more professionalism in primary schools: students must also meet practical, creative and artisanal challenges in primary school;
- (b) a stronger foundation for choice in youth education: students must be challenged in their choice of youth education;
- (c) municipalities must have greater responsibility for young people's search for VET, which is a national objective;
- (d) follow the effect of changing framework conditions: the search patterns for youth education are being closely followed;
- (e) more 10. classes must be located in vocational schools;
- (f) formation, entrepreneurship and further training opportunities in entrepreneurship, better recording opportunities, and increased focus on training.
- (g) attractive learning environments, skills development, less pupil absenteeism and better training opportunities: coherent courses from start to finish;

(22) <https://www.uvm.dk/erhvervsuddannelser/nyheder-lovgivning-og-reform/eudaftale-2018>

- (h) high quality as means of achieving better completion rates: a vocational training quality sum for attractive educational environments and greater transparency about business school ratios;
- (i) greater security in obtaining an internship: increased flexibility for the company and greater security for students in employment;
- (j) VET social and health care and mercantile VET: experimental frameworks for social and health education and transitional arrangements for students in mercantile training;
- (k) de-bureaucratisation, freedom and simplification: the central set requirements for vocational schools will be loosened;
- (l) simplifying and professionalising VET boards: VET institutions must be able to attract board members with the right skills;
- (m) access courses, extended access to the basic course Part 1 and a new basic course: adult applicants must be qualified, and access to the basic course must be extended.

Companies are involved in the effort to create new internships.

CHAPTER 4.

MTD 4 – Key competences in both IVET and CVET

4.1. Baseline 2015

In 2015, as stated as a pedagogical principle in the VET law, key competences in Danish VET were viewed as an underlying endeavour to develop students' ability to contribute to a democratic society and progress to higher education. They were integrated into the entire VET system, from general objectives in the legal framework for VET to single subjects in basic and main programmes. An emphasis on key competences was placed on the school-based part of VET, which was designed to deliver a range of broad competences aimed at supporting and providing perspectives on practical learning in companies ⁽²³⁾.

The 2015 VET reform has changed the framework for how key competences were delivered in VET. It became compulsory for learners to reach specific performance levels (marks) and pass Danish and maths in compulsory school-leaving exams, which added a stronger focus on these two key competences ⁽²⁴⁾.

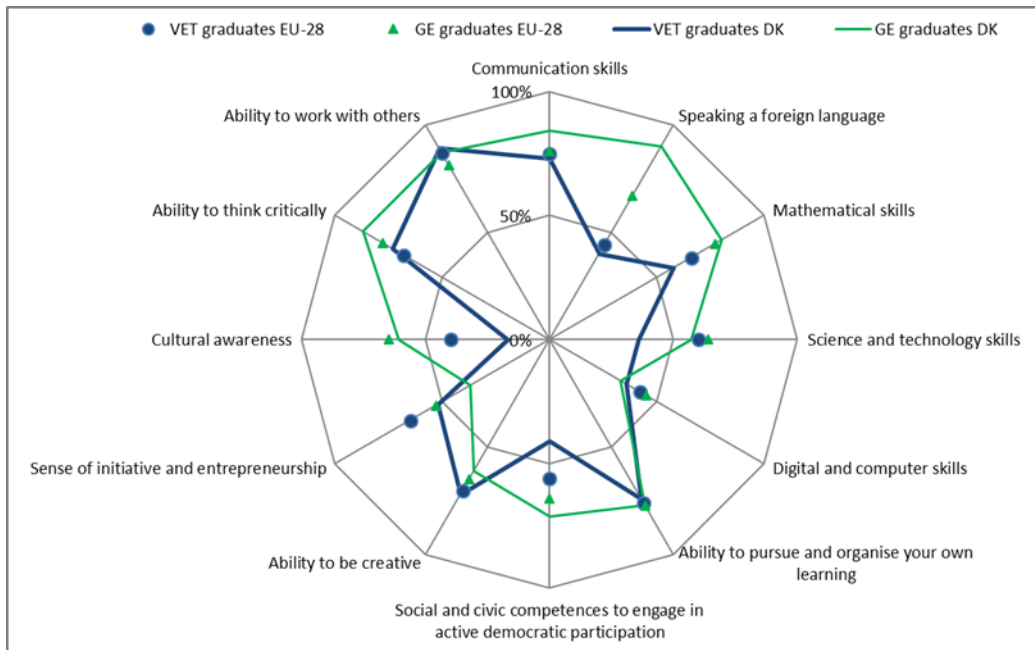
A recent survey (Cedefop, 2017c) showed that, compared with general education graduates, those who completed VET programmes felt they had:

- (a) stronger:
 - (i) sense of initiative and entrepreneurship;
 - (ii) ability to be creative;
 - (iii) ability to work with others;
- (b) weaker:
 - (i) foreign-language ability;
 - (ii) cultural awareness (Figure 2)Figure 1).

⁽²³⁾ For more information see Andersen and Kruse (2016).

⁽²⁴⁾ For more information see Andersen and Kruse (2016).

Figure 2. **Self-evaluation of acquired skills in general education (GE) and VET in 2016**

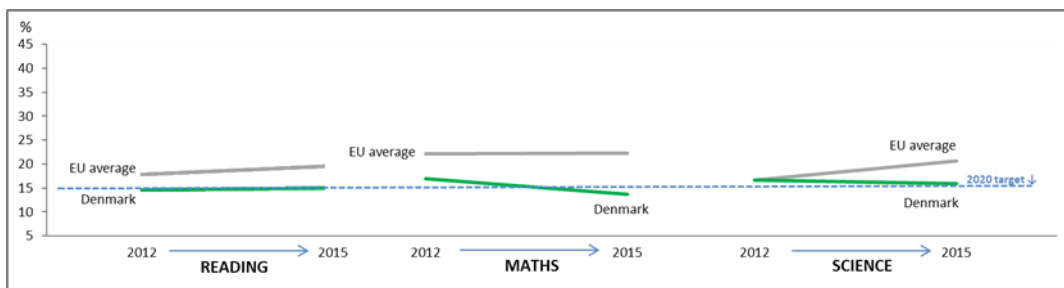


NB: GE: general education. Respondents who attended upper secondary education. Interviewees were asked in summer 2016 about their overall experiences of upper secondary education. The aggregated data do not take account of the different types and sectors of VET or the age groups of the respondents.

Source: Cedefop, 2017c.

The context of key competences in 2015 was mainly characterised by a decreasing proportion of young low achievers in maths and science, and similar levels for reading levels compared to 2012 (Figure 3). In addition, the proportion of low achievers in Denmark was much smaller than the EU average, where the trend was going in the reverse direction.

Figure 3. **Proportion of fifteen-year-olds with low achievement levels in reading, maths and science**



NB: 'Low achievement' means failing level 2 of the PISA (programme for international student assessment) scale.

Source: OECD, 2014; OECD, 2016.

As VET enrolls 42% of all upper secondary learners in the country ⁽²⁵⁾, this trend was likely to be reflected in the key competences trained for in VET programmes.

4.2. Key competences addressed in the reporting period

Table 2 summarises the key competences in initial and continuing VET that were addressed in the reporting period. A description of the policies is provided in the following sections.

Table 2. **Key competences addressed in 2015-19**

	IVET	CVET
Country language(s) and literacy	YES	
Foreign languages		
Digital competence	YES	
Maths	YES	
Science		
Technology		
Social and civic competences		
Learning to learn		
Financial literacy		
Entrepreneurship competence		
Cultural awareness and expression		
Key competences as a package	YES	

NB: This list is derived from the 2006 EU key competences framework for lifelong learning; it has been restructured and expanded with additional competences that can be considered key.

Source: Cedefop based on ReferNet input.

4.3. Policy priorities for 2016-20

For 2016-20, the country's priority in this area, as set by the Director General for Vocational Education and Training, consists in improving the proficiency of VET learners in key competences and vocational skills to make the best use of learning and to meet higher education requirements.

⁽²⁵⁾ Calculated from Eurostat, data for 2015.

4.4. Main actions taken in 2015-19

The 2015 VET reform has changed how key competences are promoted in VET. It set up two basic programmes of twenty weeks each: basic programme 1 (*grundforløb 1*, GF1), and basic programme 2 (*grundforløb 2*, GF2). Both programmes focus on key competences, but in different ways. GF1 is mainly designed to provide a basic introduction to vocational study, including workplace culture, processes and methods, society and health, Danish and various elective subjects. It is only meant for students entering VET directly from compulsory schooling. GF2 is organised as a specific training course, depending on which educational direction the student has chosen to pursue. It contains basic subjects and elective subjects. The basic subjects, which include key competences, have played a more significant role since the reform.

As part of the reform, the strategy for improving key competences in VET supports learners in achieving the highest possible level. Measures include:

- (a) admission requirements to VET from compulsory schooling have been raised for Danish and maths;
- (b) VET learners are now offered higher levels of communication and ICT skills;
- (c) following a pilot, EUX is now fully operational (Section 3.3.2.2);
- (d) the Danish Evaluation Institute has piloted the strategy at the digital VET college and published the results online, which has inspired VET colleges to address the strategic priorities ⁽²⁶⁾;
- (e) teachers' vocational and pedagogical competences are being strengthened to raise attainment levels in key competences.

One aspect of the 2015 VET reform was the suggestion that ten knowledge centres be established to provide knowledge and inspiration in specific areas relevant to the VET sector. This centre of excellence concept has emerged out of a focus on the role of further education provision in delivering education with a high degree of relevance for industry undergoing rapid change. The suggested maximum of ten knowledge centres actually materialised as nine centres with different foci: robotics and automation (two centres), welfare technology (two centres) (assisted technologies), process technology, craftsmanship and handicrafts, craftsmanship and design, sustainable building and energy related building renovation, e-business, and data-based service development. Each centre has been placed in one of the colleges, but the centres also have close

⁽²⁶⁾ Managing and setting up a common pedagogical-didactical foundation; knowledge sharing; a new way of designing teaching; stronger interplay between learning in VET colleges and learning in enterprises.

formal cooperation with knowledge institutions, other colleges and relevant industries. The knowledge centres steer the VET sector in the direction of playing a more effective and relevant role in relation to the needs of industry. A government allocation of DKK 133 million (~EUR 17.8 million) for implementation and operation in 2017-20 and a further DKK 80 million (~EUR 10.7 million) for specific technology investments provide the financial foundations for these centres ⁽²⁷⁾.

⁽²⁷⁾ <https://www.uvm.dk/aktuelt/nyheder/uvm/2017/okt/171004-her-skal-ni-nationale-videnscentre-for-erhvervsuddannelser-placeres>

CHAPTER 5.

MTD 5 – Systematic initial and continuous professional development of VET teachers, trainers and mentors

5.1. Baseline 2015

The training of VET teachers had been the responsibility of five university colleges since 2008. In 2015, the National Reform programme identified continuing professional development (CPD) for teachers as of major importance and earmarked DKK 400 million to improve the quality and attractiveness of continuing training for VET teachers. Denmark had approximately 8 000 VET teachers in around 100 VET colleges, teaching in both IVET and adult learning programmes.

5.1.1. Access to VET school teaching: entry requirements and initial training

In 2010, the requirements for VET teacher pedagogical competences were raised considerably. Since then, VET teachers must have:

- (a) qualifications at the initial VET level in the vocational field in which they were teaching, supplemented by further education (pre-service training in the relevant trade or craft);
- (b) five years of relevant and recent work experience;
- (c) general knowledge at secondary level in two or three general subjects (for instance Danish, mathematics, natural science, foreign languages) at the latest three years after being hired at a VET college;
- (d) begun a VET pedagogical diploma (DEP) at bachelor level at the latest one year after being hired;
- (e) completed DEP at the latest four years after being hired.

The aim of the DEP programme was to ensure that students:

- (a) gain a theoretical and practical basis for teaching in vocational programmes;
- (b) take part in innovative teaching practice;
- (c) develop professionally and personally.

5.1.2. In-company trainers: entry requirements and initial training

Social partners were responsible for designing and organising training in companies and for defining the requirements for the training competence of in-company trainers (nationally referred to as apprenticeship tutors or practical training instructors). There was no obligatory formal training for in-company trainers, though they could follow public continuing VET courses (AMU) that could last from ten days to six weeks.

5.1.3. VET school teachers: main lines for CPD

In 2012, an amendment to the legislation on VET required VET colleges to draw up plans for the competence development of pedagogical management. Each pedagogical leader had to have acquired competences as a pedagogical leader (10 ECTS points) as part of a diploma programme in pedagogical management. A Ministerial Order of 2013 stated that every VET college had to establish and implement a common didactical and pedagogical framework. The 2015 VET reform stated that VET colleges were required to establish a plan for the competence development of the whole teaching staff. The objective was to ensure that all VET teachers acquired vocational pedagogical competences at diploma level of at least 10 ECTS in 2015–20. The Ministry of Education laid down clear additional expectations with regard to the level and content of teachers' CPD:

- (a) CPD achievements had to be assessed at a university college or a university;
- (b) CPD training had to address pedagogical competences within the following seven content areas:
 - i. knowledge of and focus on learners' learning processes and progression;
 - ii. classroom management, with a focus on learners' learning processes;
 - iii. planning and carrying out differentiated teaching with learners' needs and potential as the starting point;
 - iv. ensuring coherence in learning processes at VET colleges and companies;
 - v. learner activating methods;
 - vi. practice-related teaching;
 - vii. pedagogical use of ICT.

VET managers could choose between these content areas according to the common didactic and pedagogical framework and strategy of each VET college. Normally, CPD was carried out at the VET college where the teacher worked.

In-service training for teachers was available, as well as a digital platform that gave VET teachers and trainers an opportunity to exchange experiences and materials in order to enhance the quality of teaching and learning in VET. Several complementary projects also supported VET teachers' CPD; for example, EU-funded projects on pedagogical management, didactics, short-term teacher traineeships in enterprises and the Copenhagen 2012-14 regional project on entrepreneurship, creativity and innovation (Cedefop, 2015).

Teacher organisations were involved in developing teacher training programmes. Trade unions' and employer organisation representatives used to take part in school boards.

5.2. Initial training for teaching and training staff in VET schools 2015-19

For 2016-20, the country's priority in this area, as set by the Director General for Vocational Education and Training, was that more teachers who are employed after 2010 should obtain pedagogical competences at diploma level within four years of starting employment, as opposed to six years previously.

Following the reform, legislation requires that VET teachers start their studies in vocational pedagogy normally one year after being recruited and complete it at least four years after recruitment at the bachelor or diploma level (60 ECTS: European credit transfer and accumulation system, EQF level 6). Four of the seven modules are mandatory and focus on teaching and learning, planning and didactics, pedagogical science theory and a final thesis. The three elective modules may include digital technologies. It is also possible to take final exams in pedagogy for at-risk groups. This model has now been fully implemented and means that a growing number of VET teachers are reaching diploma level in vocational pedagogy.

5.3. Initial training for trainers in enterprises 2015-19

Social partners have decided that training should not be compulsory for in-company trainers. However, these trainers can follow ten-day or six-week courses of public labour-market training leading to formal qualifications at EQF levels 2 to 5, such as for coaching or pedagogical guidance. These courses are primarily used in the social and healthcare sector.

5.4. Continuing professional development for teaching and training staff in VET schools 2015-19

For 2016-20, the country's priority in this area, as laid down by the Director General for Vocational Education and Training, is that all VET teachers obtain ten ECTS VET pedagogical qualifications at diploma level by 2020 (NQF 5) in a way that positively influences their teaching.

This continuing professional development (CPD) requirement is in line with the higher qualification requirement for newly recruited VET teachers. It is based on a competence needs analysis carried out by the ministry to accommodate the goals of the 2015 VET reform. Training focuses on:

- (a) learning processes and learners' progression;
- (b) related classroom management;
- (c) planning, differentiated teaching;
- (d) practice-related teaching and helping learners to link college-based and company-based learning;
- (e) activating learners;
- (f) use of ICT in teaching and learning.

Training modules are needs- and practice-oriented. More recently, the programme has been complemented by a module on entrepreneurship and an elective on practice-based teaching. It also includes training to support disadvantaged learners. Teachers can also complete a qualification in teaching Danish as a second language.

Training is provided by university colleges but takes place at VET colleges. Training outcomes are to be assessed by the university or university college. Estimates have suggested that approximately 64% of all VET teachers would need to participate in this type of training. An evaluation in 2017 showed that 39% of VET teachers employed since 2009 were following a diploma programme.

Responsibility for VET teacher CPD has been decentralised. Following the 2015 VET reform, every college needs to draw up competence development plans for all its teaching staff. These plans are developed both for the staff as a whole and individually, with their agreement ⁽²⁸⁾. In promoting competence development in pedagogy, managers choose what is needed for their college.

(28) The main Ministerial Order on VET, Paragraph 12, points 6 and 7:
<https://www.retsinformation.dk/Forms/R0710.aspx?id=179825#id6e3a034a-ba81-4375-96c5-3b3d26278be9>

The Ministry of Education encourages VET colleges to cooperate with local enterprises to secure teacher placements. Between February 2015 and February 2016, a pilot conducted by the Metropolitan University College and the Danish Technological Institute with 23 VET institutions investigated how internships could benefit VET teachers in respect of, for instance, research and development projects.

The report *Better ways to a post-compulsory education* ⁽²⁹⁾, commissioned by the Ministry of Education, was published in March 2017. It recommends a focus on capacity-building, follow-up activities and tools, as well as on adopting best practices when developing post-compulsory education. It also highlighted the need for competence development for professionals, aiming to develop common professional norms and pedagogic and didactic practices across institutions and professions ⁽³⁰⁾.

5.5. Continuing professional development for trainers in enterprises 2015-19

CPD of in-company trainers is the responsibility of their employers.

⁽²⁹⁾ <https://www.regeringen.dk/media/3015/pixie-bedre-veje-til-en-ungdomsuddannelse-01.pdf>

⁽³⁰⁾ <http://www.cedefop.europa.eu/en/news-and-press/news/denmark-better-ways-post-compulsory-education>

Statistical overview: 2019 update

Table 3 updates the figures that were provided in Table 1. Although Table 1 may contain data for 2015, these are not systematically repeated here. In some cases, not repeating is due to breaks in time series, which prevent comparability. In other cases, values differ due to methodological changes.

Table 3. **Score on VET indicators in Denmark and in the EU: 2015, last available year and recent change**

Indicator label	2015				Last available year				Recent change			
	DK	f	EU	f	Yr	DK	f	EU	f	Range	DK	EU
Access, attractiveness and flexibility												
IVET students as % of all upper secondary students	42.5		47.3	ce	'17	38.9		47.8	ce	'15-'17	-3.6	0.5
IVET work-based students as % of all upper secondary IVET	99.7		28.3	ce	'17	99.8		27.9	ce	'15-'17	0.1	-0.5
IVET students with direct access to tertiary education as % of all upper secondary IVET	55.8		68.1	ce	'17	77.8		68.6	ce	'15-'17	21.9	0.4
Workers participating in CVT courses (%)	34.6		40.8		'15	34.6		40.8				
Workers participating in on-the-job training (%)	50		34		'15	50		34				
Adults in lifelong learning (%)			10.7		'18	23.5	b	11.1		'15-'18		0.4
Enterprises providing training (%)	86.6		72.6		'15	86.6		72.6				
Female IVET students as % of all female upper secondary students	37.4		42	ce	'17	33.3		42.7	ce	'15-'17	-4.1	0.7
Employees of small firms participating in CVT courses (%)	25.4		30		'15	25.4		30				
Young VET graduates in further education and training (%)			33		'18	28.8	b	33		15-'18		0
Older adults in lifelong learning (%)			6.9		'18	17.8	b	7.3		15-'18		0.4
Low-educated adults in lifelong learning (%)			4.3		'18	14.9	b	4.3		15-'18		0
Unemployed adults in lifelong learning (%)			9.5		'18	28.5	b	10.7		15-'18		1.2
Individuals who wanted to participate in training but did not (%)					'16	9.4		11.4				
Job-related non-formal education and training (%)					'16	85.5		79.4				

Skill development and labour market relevance											
IVET public expenditure (% of GDP)			0.5	ce	'16			0.5	ce	'15-'16	0
IVET public expenditure per student (1000 PPS units)			7.1	ce	'16			7.4	ce	'15-'16	0.3
Enterprise expenditure on CVT courses as % of total labour cost	1.5		0.9		'15	1.5		0.9			
Average number of foreign languages learned in IVET	0.3	e	1	ce	'17	0.2		1	ce	'15-'17	-0.1
STEM graduates from upper secondary IVET (% of total)	17.6		29.2	ce	'17	19.5		29.1	ce	'15-'17	1.9
Short-cycle VET graduates as % of first time tertiary education graduates	17.9				'17	19.5		14.3	b ce	'15-'17	1.6
Innovative enterprises with supportive training practices (%)					'16		z	37.7			
Employment rate for IVET graduates (20-34 year-olds)			77.2		'18	88.6	b	80.5		15-'18	3.3
Employment premium for IVET graduates (over general stream)			5.4		'18	9.5	b	6.6		15-'18	1.2
Employment premium for IVET graduates (over low-educated)			23.7		'18	27	b	23.3		15-'18	-0.4
Workers helped to improve their work by training (%)	81.1		83.7		'15	81.1		83.7			
Workers with skills matched to their duties (%)	54.9		57		'15	54.9		57			
Overall transitions and labour market trends											
Early leavers from education and training (%)			11		'18	10.2	b	10.6		15-'18	-0.4
30-34 year-olds with tertiary attainment (%)			38.7		'18	49.1	b	40.7		15-'18	2
NEET rate for 18-24 year-olds (%)			15.8		'18	8.9	b	13.7		15-'18	-2.1
Unemployment rate for 20-34 year-olds (%)			12.9		'18	7.4	b	9.4		15-'18	-3.5
Employment rate of recent graduates (%)			75.9		'18	84.5	b	80.6		15-'18	4.7
Adults with lower level of educational attainment (%)			23.5		'18	18.4	b	21.9		15-'18	-1.6
Employment rate for 20-64 year-olds (%)			70		'18	78.2	b	73.1		15-'18	3.1
Employment rate for 20-64 year-olds with lower level of educational attainment (%)			52.6		'18	60.6	b	56.1		15-'18	3.5
Medium/high-qualified employment in 2030 (% of total)					'18	75.8	D	85.8	D		

EU refers to EU-28, unless otherwise specified.
(D) Forecast made in 2018.
(ce) Cedefop estimate based on available country data
(b) Eurostat: 'break in time series'.

(u) Eurostat: 'low reliability'.
(z) Eurostat: 'not applicable'.
(e) Eurostat: 'estimated'.
(d) Eurostat: 'definition differs'.

Source: Cedefop, 2020.

In 2017, 38.9% of all upper secondary students in Denmark were enrolled in IVET. This percentage is 8.9 points below the EU average. It appears that the percentage of upper secondary students in IVET is lower by 3.6 points compared to the situation in the country in 2015.

In 2017, 99.8% of all upper secondary IVET students were enrolled in a work-based learning setting, which is slightly higher (0.1 points more) than in 2015. In contrast the EU average is 27.9%.

In 2018, 23.5% of adults participated in lifelong learning activities. The EU average is 11.1%.

In 2018, the employment rate for IVET graduates (20-34 years old) is 88.6%. The EU average is 80.5%.

For the two last indicators, though data were available in 2015 (see Table 1), due to a break in time series, 2018 and 2015 cannot be reliably compared.

Conclusion

Since 2015, Denmark has taken action to enhance work-based learning and apprenticeships by ensuring involvement of companies' and by reinforcing policy governance and funding. Quality assurance mechanisms and information systems have been strengthened to improve the development of IVET provision. Initiatives have also been taken to make VET and VET qualifications more accessible to all, in particular through measures improving guidance, increasing permeability and providing opportunities to newly arrived migrants and refugees. Development of key competences was also supported. And a reform of the initial and continuing training of VET school teachers was undertaken.

The main change in 2017 was that, as a follow-up to the 2015 VET reform, nine knowledge centres were established to support the provision of industry-relevant further VET (Section 4.4).

Compared to 2015-17, the main change in 2018 took place in MTD 3 where initiatives were launched to:

- (a) give young people more room in choosing their training pathway and switching from a pathway to another (Section 3.3.1.3);
- (b) simplify and 'de-bureaucratise' the management of VET to make VET more attractive and increase enrolment in it (Section 3.3.5).

The actions carried out show that the main lines of the Riga conclusions and the country's policy priorities for 2016-20 are being addressed.

Acronyms

AES	adult education survey
CPD	continuing professional development
CVET	continuing vocational education and training
DEP	pedagogical diploma programme
DGVT	Director General for Vocational Education and Training
EAfA	European alliance for apprenticeship
ECTS	European credit transfer and accumulation system
EQAVET	European quality assurance in vocational education and training
EQF	European qualifications framework
Eurostat	statistical office of the European Union
EUV	VET for adults
EUX	combined vocational and general upper secondary programme
EVA	Denmark's Evaluation Institute
GDP	gross domestic product
GE	general education
GF1	<i>grundforløb 1</i> (basic programme 1)
GF2	<i>grundforløb 2</i> (basic programme 2)
IGU	new basic integration programme
ISCED	international standard classification of education
IT	information technology
IVET	initial vocational education and training
NEETs	not in education, employment, or training
NQF	national qualifications framework
OECD	Organisation for Economic Cooperation and Development
PISA	programme for international student assessment
PPS	purchasing power standards
QANRP	quality assurance national reference point
RPL	recognition of prior learning
STEM	science, technology, engineering and math programmes
UOE	UNESCO, OECD, Eurostat
VET	vocational education and training
VIVE	Danish Centre for Social Science Research

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